

REMARKS/ARGUMENTS

Claims 1-20 are pending. Claims 1, 13, 14, and 20 have been amended. No new matter has been introduced. Applicants believe the claims comply with 35 U.S.C. § 112.

Claims 1, 3, 6, 7, 9, 11, 13, 14, 16, 19, and 20

Claims 1, 3, 6, 7, 9, 11, 13, 14, 16, 19, and 20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Singhai et al. (US 2005/0055406).

Applicants respectfully submit that independent claim 1 is novel and patentable over Singhai et al. because, for instance, Singhai does not teach or suggest buffer securing means for taking memory buffers having a reserved-buffer size specified in addition to a buffer-reservation target in a request made by an external requester through the network as a request for a buffer reservation out of the available buffer and reserving the taken memory buffers as a reserved buffer for the buffer-reservation target in response to the request for a buffer reservation based on the reserved-buffer size specified in the request. The request for the buffer reservation is made by an external requester through the network, and includes the buffer-reservation target and the reserved-buffer size.

Although Singhai et al. discloses allocating communication buffers, it does not teach that the request includes both the buffer-reservation target and the reserved-buffer size. Instead, it merely states that "[c]ommunication buffer memory can be analyzed to determine whether sufficient memory may be available to fulfill the incoming resource request (Op. 303)" (paragraph [0087]). Singhai et al. also states: "Certain communication buffer managers may be configured to select the size, number, or both, of process buffers and of reserve buffers, responsive to an anticipated buffer size, an intended communication purpose of the local communication interface, a predetermined communication parameter, and a combination thereof." Paragraph [0028]. The communication manager 203 resides in the local host 201 (Fig. 2). Thus, nothing teaches or suggests that the request from an external requester through the network includes the buffer-reservation target and the reserved-buffer size.

For at least the foregoing reasons, claim 1, and claims 3, 6, 7, 9, and 11 depending therefrom, are novel and patentable over Singhai et al.

Applicants respectfully submit that independent claim 13 is novel and patentable over Singhai et al. because, for instance, Singhai does not teach or suggest a buffer control unit for taking memory buffers having a reserved-buffer size specified in addition to a buffer-reservation target in a request made by an external requester through the network as a request for a buffer reservation out of the available buffer and reserving the taken memory buffers based on the reserved-buffer size specified in the request. The request for the buffer reservation is made by an external requester through the network, and includes the buffer-reservation target and the reserved-buffer size.

As discussed above, Singhai et al. discloses that certain communication buffer managers in the local host may be configured to select the size, number, or both, of process buffers and of reserve buffers, responsive to an anticipated buffer size, an intended communication purpose of the local communication interface, a predetermined communication parameter, and a combination thereof, but does not teach or suggest that the request from an external requester through the network includes the buffer-reservation target and the reserved-buffer size.

For at least the foregoing reasons, claim 13 is novel and patentable over Singhai et al.

Applicants respectfully submit that independent claim 14 is novel and patentable over Singhai et al. because, for instance, Singhai does not teach or suggest buffer securing means for taking memory buffers having a reserved-buffer size specified in addition to a buffer-reservation target in a request made by the storage management device through the network as a request for a buffer reservation out of the available buffer and reserving the taken memory buffers as a reserved buffer for the buffer-reservation target in response to the request for a buffer reservation based on the reserved-buffer size specified in the request. The request for the buffer reservation is made by a storage management device through the network, and includes the buffer-reservation target and the reserved-buffer size.

As discussed above, Singhai et al. discloses that certain communication buffer managers in the local host may be configured to select the size, number, or both, of process

buffers and of reserve buffers, responsive to an anticipated buffer size, an intended communication purpose of the local communication interface, a predetermined communication parameter, and a combination thereof, but does not teach or suggest that the request from a storage management device through the network includes the buffer-reservation target and the reserved-buffer size.

For at least the foregoing reasons, claim 14, and claims 16 and 19 depending therefrom, are novel and patentable over Singhai et al.

Applicants respectfully submit that independent claim 20 is novel and patentable over Singhai et al. because, for instance, Singhai does not teach or suggest a buffer control unit for taking memory buffers having a reserved-buffer size specified in addition to a buffer-reservation target in a request made by the storage management device through the network as a request for a buffer reservation out of the available buffer and reserving the taken memory buffers as a reserved buffer for the buffer-reservation target in response to the request for a buffer reservation based on the reserved-buffer size specified in the request. The request for the buffer reservation is made by a storage management device through the network, and includes the buffer-reservation target and the reserved-buffer size.

As discussed above, Singhai et al. discloses that certain communication buffer managers in the local host may be configured to select the size, number, or both, of process buffers and of reserve buffers, responsive to an anticipated buffer size, an intended communication purpose of the local communication interface, a predetermined communication parameter, and a combination thereof, but does not teach or suggest that the request from a storage management device through the network includes the buffer-reservation target and the reserved-buffer size.

For at least the foregoing reasons, claim 20 is novel and patentable over Singhai et al.

Claims 2 and 15

Claims 2 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Singhai et al. in view of Helmy et al. (US 2005/0025150). The Examiner Helmy et al. for allegedly disclosing a proxy device capable to buffer data in an amount of the TCP

window size, wherein the TCP window size is the product of the bandwidth times the expected latency delay.

Even assuming that Helmy et al. discloses or suggests the features recited in dependent claims 2 and 15, it still does not cure the deficiencies of Singhai et al. in that Helmy et al. also fails to teach or suggest that the request for the buffer reservation is made by an external requester or a storage management device through the network, and includes the buffer-reservation target and the reserved-buffer size, as recited in independent claim 1 from which claim 2 depends and independent claim 14 from which claim 15 depends. Therefore, claims 2 and 15 are patentable.

Claims 4, 5, 8, 12, 17, and 18

Claims 4, 5, 8, 12, 17, and 18 stand under 35 U.S.C. § 103(a) as being unpatentable over Singhai et al. in view of Row et al. (US 5,931,918). The Examiner cites Row et al. for allegedly disclosing a file server architect with network controller unit, file controller unit, and storage controller unit capable of directly transferring data in a network environment, using NFS protocols over TCP/IP layers, wherein the buffer-reservation target is an inter port communication between a network port of the storage device and a network port of another storage network.

Even assuming that Row et al. discloses or suggests the features recited in dependent claims 4, 5, 8, 12, 17, and 18, it still does not cure the deficiencies of Singhai et al. in that Row et al. also fails to teach or suggest that the request for the buffer reservation is made by an external requester or a storage management device through the network, and includes the buffer-reservation target and the reserved-buffer size, as recited in independent claim 1 from which claims 4, 5, 8, and 12 depend and independent claim 14 from which claims 17 and 18 depend. Therefore, claims 4, 5, 8, 12, 17, and 18 are patentable.

Claim 10

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Singhai et al. in view of Helmy et al. and Row et al.

As discussed above, even assuming that Helmy et al. and Row et al. disclose or suggest the features recited in dependent claim 10, they still do not cure the deficiencies of

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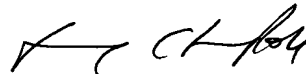
Singhai et al. in that they also fail to teach or suggest that the request for the buffer reservation is made by an external requester through the network, and includes the buffer-reservation target and the reserved-buffer size, as recited in independent claim 1 from which claim 10 depends. Thus, claim 10 is patentable.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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